Establishing an In-Office Minimally Invasive Surgery Practice: Driving Better Patient and Practice Outcomes

Announcer:
Welcome to Grand Rounds Nation on ReachMD. This CME activity, titled “Establishing an In-Office Minimally Invasive Surgery Practice: Driving Better Patient and Practice Outcomes” is provided by Omnia Education and supported by an educational grant from Hologic, Inc.

The faculty for this activity is Dr. Charles E. Miller.

Prior to beginning this activity, please be sure to review the faculty and commercial support disclosure statements as well as the Learning Objectives.

Here is Dr. Miller.
Dr. Charles E. Miller:

Well, I’m happy to be with you all today to discuss bringing hysteroscopic surgery to one’s office, and I think it’s very important when discussing hysteroscopy to really discuss why we do hysteroscopy. After all, hysteroscopy is the gold standard for the evaluation of the uterine cavity, the endocervix. We utilize it for abnormal uterine bleeding, both in the premenopausal as well as the postmenopausal state. It is utilized in infertility, for adhesions, to diagnose adhesions, retained products of conception. We utilize it from a standpoint of diagnosing polyps and intrauterine myomata. It, in fact, allows us the most accurate way of diagnosing intrauterine pathology from the standpoint of polyps and fibroids and scar tissue, endometrial hyperplasia, retained products, and even that C-section scar, the niche, the isthmocele. Plus, hysteroscopy affords the physician, affords us the opportunity to both peek, take a look and treat at the same time and get it done.

The development of this skill set in utilizing hysteroscopy to both diagnose and to treat will, in my opinion, certainly add value to your practice because it opens up a whole new line of referral from a standpoint of the physicians; primary care physicians. Offering in-office hysteroscopy allows physicians to offer their patients the best procedure for the best outcomes, and we’re going to go into just why I consider that to be important.

The patient benefit, it’s the most efficient; it’s less time consuming. They don’t have to go in to a central triage to get ready for the procedure. They know the staff. They know the workings of the office. It’s also much more comfortable.

There’s obvious benefit to you as the physician. You’re more efficient. It’s less time-consuming. You’re not having to go to the surgery center or to the hospital for one short hysteroscopy, put on your clothes, change your clothes, go to the locker, put on your scrubs, change your scrubs, go back to clothes, back to your office. All of this becomes very inefficient. Add to that travel time. Again, because you spend most of your time in the office, you have the greatest ability to control your own schedule in terms of seeing these patients. You also have more control of your surgical environment. You have trained people to do these procedures.

Now, why is this especially important? Well, what you see are Medicare physician fee schedules that many of the insurances have adapted over the past several months. What has really changed is 58558, hysteroscopy with biopsy. That means polypectomy, evacuation of retained products, myomectomy, any time you generate a specimen, because now the non-facility fee, i.e. the in-office fee, went up $1,000. In 2016, it was $442. In 2017, it’s $1,446. It does involve having a specimen.

So, at a time when one would sense with falling reimbursement that this is something we all should be on board with, we know that gynecologists just are reluctant to bring hysteroscopic surgery to the
office. In fact, only approximately one-fourth to one-third of practicing gynecologists in our country perform office hysteroscopy. Now, why would that be? Well, certainly there’s the experience issue and something that is very important in our discussion today. There’s the concern about that original investment, both in terms of time and money to bring this new patient population to your office, the perception that there are going to be prohibitive costs in terms of starting up, getting hysteroscopic equipment. The spokes, etcetera, the light sources obviously have to be procured. There is concern with pain control. Are our patients going to be comfortable during the procedure? And obviously, there’s always, and importantly, we should all have a concern for safety. In fact, the ACOG Presidential Task Force on Office Surgery stated patients have a right to expect the same level of safety regardless of where they seek their treatment, and we all know “physician do no harm” is so very important in our daily lives.

Well, in choosing the patients to bring to the office, it’s really imperative that our patients be healthy. We want to avoid comorbid conditions: psychosocial issues that would make this a very difficult time for the patient; unrealistic patient expectations, the fact that they are just going to bounce in and bounce out of this procedure, potentially not experience any kind of discomfort at all; especially when a patient does not have sedation, that patient who is very anxious. Particularly, if they are morbidly obese or they have cardiac disease, lung disease, this could really add to problems in an office situation. If, indeed, one is using sedation—and we do a lot of sedation with our patients; we work very closely with anesthetists—we certainly avoid patients with ASA classifications of III or IV. We are not taking on anesthesia risk.

So, as far as staying safe, make sure that you look at surgery guidelines. There are surgery guidelines through the American College of OB/GYN, the American College of Surgery, and even the American Society of Anesthesiologists all have guidelines regarding outpatient procedures. Talk with your professional liability insurer. Know that you’re expanding your practice to include in-office procedures. And, of course, review the rules and recommendations of your state regulatory agency. Understand what you can do and how you can do things safely. That’s the order of the day.

As you get ready, make sure that your staff members are ACLS credentialed. You always have to expect the unexpected. You always have to expect the worst. We also have enough staff during the procedure. Not only am I there, obviously, as the surgeon. If we are using anesthesia, there is an anesthesia person, either an anesthesiologist or anesthetist, but then I have two staff members, one who is monitoring fluid management very closely while the other may be going in and out of the room to help me with instrumentation or to make sure my instrumentation is working properly throughout the procedure.
Now, your staff members are going to need to gain familiarity with the procedure. Bring the staff members to your outpatient procedures in the ASC or the hospital. I am sure in other offices physicians constantly are willing to invite other physicians to their offices.

As we get started, we have to think about what instrumentation we’re going to use. Some people like to use flexible hysteroscopes. The advantage of flexible hysteroscopes is that they are very tiny, so they cause very little trauma. There are some disadvantages, and that’s, quite honestly, why I have never really brought flexible hysteroscopy into my office. Number one, they don’t give me an option to treat. It’s mainly as a diagnostic tool. Secondly, they can be difficult to use. They are flexible. It’s getting them to be in the place you want them to be, and finally, the cost. So, I generally use an operative hysteroscope with a 30-degree lens. By doing that angled lens, I can see the cornu more readily without having to manipulate the uterus. We use--in our office hysteroscopes--we use diameters in a range of about 5.5 to 6.5 mm with continuous flow.

Improved reimbursement for hysteroscopic polypectomy and endometrial biopsy now enables us to use hysteroscopic morcellation systems and still have the procedures cost-effective. MyoSure and TRUCLEAR are electrical mechanical system, while the resector uses one’s hand to excise the tissue. The advantage of utilizing a morcellation system is that essentially as the tissue is resected, it is immediately suctioned off, so there is not the problem of being able to retrieve the specimen. The second advantage, particularly with MyoSure and TRUCLEAR morcellation systems, is that it is very fast. A third advantage is the ability to utilize secondary instrumentation that are anywhere from 5 to 9 French through both the MyoSure and the TRUCLEAR scopes. So, we have found that we can do virtually all our procedures at present utilizing these scopes and, when needed, utilizing the morcellation systems to remove tissue.

In terms of further equipment, one needs to have a monitor to visualize, the camera, including the camera head processor, light source, fiberoptic cable so that one can get a very bright view of the tissue. If one is using morcellation, one has to utilize wall suction or have a suction device that allows the suctioning off of the tissue. When possible and the procedure is more involved, we use 3,000 cc bags with a pressure cuff; otherwise, we will use for shorter procedures 1,000 cc bags. Along with that we utilize a fluid collection bag so at the end of the procedure we can true up. We know how much fluid has been lost. If one wants to be more exact, then certainly, if you are going to do more major cases hysteroscopically in the office setting, you may want to consider a fluid management system.

In terms of preparation, we also go ahead and give misoprostol prior to the procedure. This causes cervical softening. Now, we do warn our patients that the misoprostol can cause problems with abdominal pain, nausea, diarrhea, fever, and sometimes patients have spotting as well, but we utilize it
very effectively in our in-office procedures as it helps us gain access to the endometrial cavity by allowing the cervix to soften up before the procedure itself.

Perhaps the biggest issue in an office setting is the challenge of pain control. It, in fact, is the most frequent cited reason for failure of an office hysteroscopy. There are multiple sources of discomfort: the speculum, the cervix, distending the uterus, manipulating the endometrium, and even the Fallopian tube in the case of doing sterilization procedure. One of the techniques that we utilize to overcome this and something I’ll be talking on shortly is vaginoscopy. When one looks at pain, there are various analgesia options. NSAIDs: there are, you can see, ibuprofen, meloxicam, naproxen. Clinical efficacy is fairly similar. One can go to narcotics: oxycodone, fentanyl, which is short-acting, tramadol, but one has to be concerned about somnolence as well as respiratory depression. Anxiolytics can be utilized: lorazepam, diazepam, alprazolam—again, the concern of respiratory depression, CNS depression. We are not going to gain analgesia with use of anxiolytics; rather, it reduces anxiety, but certainly when used in combination with narcotics, you are going to see a reduction in pain of the procedure, and, of course, the use of local technique, paracervical, intracervical block.

One of the risks, though, that one always has to remember is risk of vasovagal, neuro or cardiotoxicity. Be sure when you are doing a block that you aspirate so that there is no blood. Do not do an intravascular injection, as this can cause certain cardio and even deadly toxicity.

Vaginoscopy is basically no-touch hysteroscopy. A small caliber scope is placed in the vagina. We do not use a speculum. We do not use a tenaculum. By placing that scope in the vagina, you then find the external os and move that scope into the internal os on up into the uterus itself. To do this you can use a 3 mm single flow or a 5 mm continuous flow. We think it is, again, very nice to use an angled scope. You can, of course, as mentioned, utilize a flexible scope. There is great data looking at vaginoscopy, that is really classic data. The first was a study in 1997 by Stefano Bettocchi, a very good friend of mine, looking at 680 patients, 96 reported no discomfort, 96%. A subsequent study, 11,000 vaginoscopic procedures, over 99% reported no discomfort. So, you can see this truly is a tremendous way of minimizing the risk of pain to your patients.

We like to use an angled scope because it optimizes visualization. We’re able to just rotate the stem of the instrument so that the angle goes toward one cornu, then goes to another, and we do not have to really manipulate the hysteroscope tip to get into the cornu. We stay central and simply rotate the angle so that we can visualize. Now, when you do use an angled scope, you have to understand that the image displayed on the screen reflects what is actually above the tip, so you have to know that as you go in, you have to see the upper part of the cervix and then into the uterus, because if you feel like you’re viewing the upper part, you are actually in the middle. Think about it. If you change that angle to
the middle, you are actually heading your scope posteriorly down toward the back of the cervix and the uterus, and that will cause needless, needless discomfort for the patient. So, with an angle up scope, as you’re looking to get in, you’re going to see anteriorly more so than posteriorly. You place the patient in dorsal lithotomy. We utilize an under buttocks drape with a pouch so we can collect the fluid, as I previously mentioned. That is then measured at the end of the procedure. Again, we use our 1,000 to 3,000 cc saline bags hung on a tall IV pole, and we use a pressure bag. We clean the cervix with Betadine, or chlorhexidine if the patient is allergic, spread the labia, guide the scope posteriorly first into the posterior fornix. If there is leaking, we gently pinch the labia with gauze. We then slowly place the scope back, pull the scope back, until we see the cervix and then move it toward the external os. We then introduce that scope through the os into the endocervical canal and on into the uterine cavity. Of course it is imperative that your nurse is monitoring your fluid inflow and outflow with the procedure. And that’s the technique. Again, if I see a minor amount of disease, I’m going to use scissors and graspers. More involved procedures, I will use a hysteroscopic morcellation technique, either MyoSure or TRUCLEAR.

Finally, how do you get this started? I mean, okay, now you’ve done all this work, all this preparation. You’re confident that you can do this procedure safely. You have the instrumentation, and you want to open your doors. How do you market yourself? Well, we’ve already talked about sharing what you’re doing with your colleagues. You know, interestingly, even colleagues that you would be fairly competitive with in the sense that you have similar practices, you can talk with about potential referral. Ultimately, they want to get the patient back, and that’s the way that you can present it. But it is important to touch bases with Interventional radiologists, with generalists, internal medicine, family practice, the REIs that you work with who just don’t want to do those procedures. It’s also very important to spread the word about your burgeoning MIS practice in-office hysteroscopy. Then, e-mail announcements, let your patient base know it. Plan events. open houses, both for patients and professionals, where you’re talking about the procedures. Let them see the technique about what you’re doing. Perhaps interview a patient who has undergone the procedure. Let patients or professionals ask the patient their own questions about the procedures. Develop materials. Often times this can be done in conjunction with many of the MIS companies that will help you establish materials that are both patient as well as professional related.

One of the things that we have done, even though I’m an old doc, I’ve been involved with social media, might consider Facebook or Twitter. We have an ongoing involvement with Facebook, not only reaching out with our patients, we’ve had patients involved in blogs with great interest from patients, as they not only see what we’re doing but seeing how other patients are responding.

So, in summary, we know that bringing hysteroscopy to the office certainly has its requirements. Rome
just was not built in a day. One has to have knowledge of existing guidelines and state regs. You have to have your discussion with your professional liability insurer. Proper training, not only for yourself but of your staff, make sure you have ACLS certification. For the most part, there will be some capital equipment purchasing and the need to learn a new technique—that is vaginoscopy. At the same time, you will have to become familiar with intraoperative pain control technique, and potentially, you will need to reach out to anesthetists or anesthesiologists if you plan to expand to a more difficult patient population. But, at the end of the day, bringing hysteroscopy to the office will certainly add value to your practice. It will open up a whole new referral source. You will become the local expert in abnormal uterine bleeding and other concerns with intrauterine pathology. You will have increased patient satisfaction as they are treated efficiently in an area that they navigate very well. It will enhance your efficacy, your efficiency, your getting through your day, and at the end of the day, it will provide a new revenue stream.

Thank you.

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